

# Plastic Injection Moulding Troubleshooting Guide

**ToolcraftPlastics**  
Moulding Your Ideas...

Unit 5, Argyle Comm. Centre  
Argyle Street, Swindon  
Wiltshire, SN2 8AR.  
01793 - 64 10 40

## Moulding Fault ↓

	Suggested Remedy ↓																			
Moulding Fault	Injection pressure	Barrel temperature	Holding pressure & time	Nozzle temperature	Screw speed	Injection speed	Back pressure	Mould temperature	Gate size	Tool venting	Material Dry ?	Bridging at throat ?	Machine capacity ?	Back zone temperature	Throat cooling ?	More blending required or Temperature control ?	Heat in feed zone or Usage rate	Screw & barrel ok ?	More heat stable concentrate needed or machine temp. control	
Black streaks or spots	-	-	-	-							?							?	?	
Brittleness	-	-	-	-	-	?	-	+	?	?										
Burning	-	-	-	-	-	-	-	+	+	?	?								?	
Cloudy appearance	+						+				?	?								
Colour variation shot to shot	-										?	-	?	-	-					
Ejection difficulties	-	-	-		-		-													
Flashing	-	-	-	-	-	-	-	+			?									
Gate Splay	-	-	-		+		+	+	+	+	?						?		?	
Gloss	+	+			+		+	+	+	+	?									
Jetting	±	+	±	+	±	+	+	+	+	+	?	?	?							
Lamination	+		+	+	±	±	+	+	+	+	?	?						-		
Loss of colour												?						-	?	
Orange skin	+	+	+		+		+	+	+											
Parts oversize	-	-	-				+				?									
Parts sticking in	-	-	-		-		-													
Parts undersize	+	+	+		+	+	-	+												
Poor distribution	+			-		+					?	?	?	-	?	-				
Screw not returning	±		+		-						?	?	-	?	-					
Screw slip	-						-											-		
Short shot	+	+	+	+	+	+	+	+	+	+							?			
Silver streaks	-		-		-				+		?	?								
Sinking & voids	+	±	+	±	-	-	-	-	+	+							?			
Visible weld lines	+	+	+	+	+	+	+	+	+	+	?	?								
Warpage	-	±	-		+	+	±													

Key: + = Increase - = Decrease ± = Try Increasing or Decreasing ? = Check

Note: Due to the wide range of options and plastic injection moulding materials available, this information is for use as a guide only and is supplied in good faith without obligation or liability.

For further assistance with any of the following areas, please contact us at the above address or use the links below :-

- ◆ [3d Product Design](#)
- ◆ [Injection Mould Tools](#)
- ◆ [Injection Moulding](#)
- ◆ [Custom Vacuum Forming](#)
- ◆ [Pad & Hot Foil Printing](#)
- ◆ [Ultrasonic Welding](#)
- ◆ [EMI / RFI Shielding](#)
- ◆ [Plastic Component Trays](#)